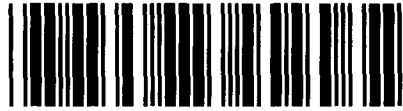


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**2019 Energy Plan and Report**

**Pursuant to P.U.C. SUBST. R. § 25.181(n)**

**April 1, 2019**

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**Project No. 49297**

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## **Introduction**

CenterPoint Energy Houston Electric, LLC (CenterPoint Houston) presents this Energy Efficiency Plan and Report (EEPR) to comply with Substantive Rules § 25.181, § 25.182 and §25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 and Substantive Rule § 25.181 require that each investor-owned electric utility achieve the following savings goal through market-based standard offer programs (SOPs) and limited, targeted, market transformation programs (MTPs):

- 0.4% reduction of the electric utility's peak demand of residential and commercial customers for the 2018, 2019 and 2020 program years.

The format used herein is consistent with the requirements outlined in § 25.181(l) and the Company's 2018 EEPR filing. The EEPR presents the results of CenterPoint Houston's 2018 energy efficiency programs and describes how the company plans to achieve its goals and meet the requirements set forth in § 25.181. Planning information provided focuses on 2019 and 2020 projected savings and budgets, as well as information on programs to be offered, and discusses outreach, informational activities and workshops designed to encourage participation by energy service providers and retail electric providers (REPs).

## **EEPR Organization**

This EEPR consists of an executive summary, fifteen (15) sections, and three (3) appendices. Sections one through four provide the Energy Efficiency Plan (The Plan), while sections five through eleven present energy efficiency report information. The final four sections address the Energy Efficiency Cost Recovery Factor (EECRF). The three appendices provide a description of the acronyms used throughout the report, give the location of the glossary of commonly used terms, and the demand and energy savings for each program by county.

## Executive Summary

The Plan portion of this EEPR details CenterPoint Houston's plans to achieve a 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2019, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2020. The Plan also addresses the corresponding energy savings goal, which is calculated from the demand savings goal using a 20% capacity factor. The goals, budgets, and implementation plans that are included herein are determined by requirements of Rule § 25.181 and the information gained from prior implementation of the selected programs. Table 1 presents a summary of 2019 and 2020 goals, projected savings, and projected budgets.

**Table 1: Summary of Annual Goals, Projected Savings and Projected Budgets<sup>1</sup>**

	Calendar Year	Normalized Peak Demand	MW Goal	Demand (MW) Goal	Energy (MWh) Goal <sup>2</sup>	Projected MW Savings	Projected MWh Savings <sup>3</sup>	Projected Budget (in 000's)
Annual Goals	2019	15,485	0.4% of peak demand	61.94	108,519	159.25	188,231	\$37,898
	2020	15,704	0.4% of peak demand	62.82	110,061	161.76	189,482	\$37,821

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<sup>1</sup> Peak Demand figures are from Table 4; Projected Savings from Table 5; Projected Budget from Table 6. All MW and MWh figures in this Table and throughout this EEPR are measured at the meter.

<sup>2</sup> Calculated using a 20% capacity factor

<sup>3</sup> Peak demand reduction and energy savings projections are for the current and following calendar year that CenterPoint Houston is planning and budgeting for in the EEPR. These projected savings reflect estimates based on information gained from prior implementation of the programs.

In order to reach the projected savings presented in Table 1, CenterPoint Houston will implement the following programs:

1. Commercial Standard Offer Program (SOP)
2. Commercial Market Transformation Program
3. Commercial Load Management (SOP)
4. Retro-Commissioning MTP (RCx)
5. REP (Commercial CoolSaver)
6. CenterPoint Energy High Efficiency Homes MTP
7. Advanced Lighting MTP
8. Mid-Stream MTP (A/C and Pool Pump Distributor)
9. REP (Residential CoolSaver and Efficiency Connection)
10. Smart Thermostat Program (Pilot)
11. Multi-Family Market Rate MTP
12. Residential Demand Response SOP
13. Residential & Small Commercial (SC) SOP
14. Hard-to-Reach SOP
15. Multi-Family MTP HTR
16. Targeted Low Income MTP (Agencies in Action)

Where applicable, program manuals for these programs can be found on CenterPoint Houston's sponsor portal <https://centerpoint.anbetrack.com/>

As detailed in this report, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory energy efficiency savings goal of 0.4% peak demand reduction. CenterPoint Houston's goals for 2018 were 61.42 MW in peak demand reduction and 107,608 MWh in energy savings. Actual achieved reductions in 2018 totaled 177.18 MW and 164,363.87 MWh. The total forecasted spending for 2018 was \$36.435 million, actual 2018 spending totaled \$30.509 million.

## Energy Efficiency Plan

### I. 2019 Programs

#### A. 2019 Program Portfolio

CenterPoint Houston plans to implement 16 programs in 2019. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Houston anticipates that targeted outreach to a broad range of service providers will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

**Table 2: 2019 Energy Efficiency Program Portfolio**

<b>Program</b>	<b>Target Market</b>	<b>Application</b>
Commercial Standard Offer Program (SOP)	Large Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare, Data Center)	Large Commercial	Retrofit; New Construction
Commercial Load Management (SOP)	Large Commercial	Load Management
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
REP (Commercial CoolSaver)	Large Commercial	Retrofit
CenterPoint Energy High Efficiency Homes MTP	Residential	New Construction
Residential & Small Commercial (SC) SOP	Residential & Commercial	Retrofit
Smart Thermostat Program (Pilot)	Residential	Retrofit; New Construction
Advanced Lighting MTP	Residential & Commercial	Retrofit; New Construction
Mid Stream MTP (A/C and Pool Pump Distributor)	Residential & Commercial	Retrofit
REP (Residential CoolSaver and Efficiency Connection)	Residential	Retrofit
Residential Demand Response SOP	Residential	Load Management
Multi-Family Market Rate MTP	Residential	New Construction
Hard-to-Reach SOP	Hard-to-Reach	Retrofit
Multi-Family MTP HTR	Hard-to-Reach	New Construction
Targeted Low Income MTP (Agencies in Action)	Hard-to-Reach	Retrofit



The programs listed in Table 2 are described further in sub-section B. CenterPoint Houston maintains two energy efficiency websites<sup>4</sup>: one targeted to the end user and one for project sponsors. The energy efficiency sponsor portal contains requirements for project participation and most of the forms required for project submission. These websites provide project sponsors with program updates and information.

## **B. Existing Programs**

### **Commercial Standard Offer Program (SOP)**

#### ***Program Design***

The Commercial SOP targets commercial customers by offering incentives paid for a variety of measures installed in new or retrofit applications including: lighting, HVAC, motors, or other custom measures.

#### ***Implementation Process***

CenterPoint Houston will continue implementation of its Commercial SOP where any eligible project sponsor may submit applications for qualifying projects.

#### ***Outreach and Research activities***

- Maintains internet website with program processes on how to register for participation, as well as how to input a viable project, detailed project eligibility, end-use measures, incentives, workbooks to assist with providing incentive estimates, as well as procedures and application forms
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conduct workshops as necessary to explain elements such as: responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

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<sup>4</sup> CenterPoint Houston energy efficiency website is [www.centerpointefficiency.com](http://www.centerpointefficiency.com) ; CenterPoint Houston's sponsor portal is <https://centerpoint.anbetrack.com/>

## **Commercial Market Transformation Program (MTP)**

### ***Program Design***

The Commercial MTP includes the following three program offerings: SCORE/CitySmart, Healthcare Energy Efficiency Program (HEEP), and the Data Center Energy Efficiency Program (DCEEP)

The SCORE/CitySmart program targets public and private K-12 schools, public and private higher education, cities, counties, state governmental agencies, non-profit and faith-based organizations. Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make decisions about cost-effective investments. The SCORE Lite portion of the program provides higher incentives to participants that do not require the technical assistance or engineering analysis provided by the implementer.

HEEP provides technical support and incentives for implementing energy efficiency projects to eligible healthcare facilities including hospitals, doctors' offices, clinics, laboratories, medical office buildings, and assisted living/nursing care facilities. Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make informed decisions about installing cost-effective energy efficiency measures.

The DCEEP provides technical support and incentives for implementing energy efficiency projects to commercial customers that have a dedicated data center, server room or server closets for specialized IT-related equipment such as data storage, web hosting and telecommunications.

### ***Implementation Process***

The Commercial MTP uses third party implementers to help eligible participants identify energy efficiency measure upgrades in their facilities. The program pays incentives to participants for approved measures that result in both demand and energy savings.

### ***Outreach and Research Activities***

- Contracts with third-party program implementers to implement outreach and planning activities
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts workshops as necessary to explain elements of program requirements, incentive information, application and reporting processes.

## **Commercial Load Management SOP (CLM)**

### ***Program Design***

The CLM will be available to non-residential distribution customers, as well as governmental, educational, and non-profit transmission customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an EEA2 event or deems that an EEA2 event is imminent. Incentives will be paid to project sponsors for measured and verified kW reductions based on their average performance over all events. Participating facilities must be equipped with an Interval Data Recorder (IDR) or smart meter, and be able to curtail a minimum of 100 kW to be eligible.

### ***Implementation Process***

Implementation of this program will be through customers and third-party entities representing eligible facilities within the CenterPoint Houston service territory. The CLM will initiate up to a maximum of six events totaling 22 hours per year during the summer on peak period (up to a maximum of 2 test curtailments lasting 1 to 3 hours; and up to a maximum of 4 unscheduled events based on ERCOT EEA2 events lasting 1 to 4 hours each). A 30-minute notice is given to all participants prior to each event.

### ***Outreach and Research Activities***

- Maintains program information in the program tracking database.
- Conducts workshops as necessary to explain elements such as responsibilities of the project participant, project requirements, incentive information, and the application and reporting process
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

## **Retro-Commissioning MTP (RCx)**

### ***Program Design***

RCx is an optimization program for existing buildings that identifies no-cost or low-cost measures (up to a 3-year simple payback) the customer can implement to reduce the demand and energy usage in commercial facilities. The program is designed to provide end-users with a free engineering analysis to improve the performance within their facilities that will reduce electric demand and consumption. Facility owners are required to implement all identified measures with simple payback of less than 1.5 years or pay towards the cost of the analysis. Beginning in 2019, customers will be eligible to receive incentives based on kWh savings and how quickly the low-cost or no-cost measures are implemented.

### ***Implementation Process***

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Houston's website. RCx Agents, typically engineering consulting firms, are used to deliver the program to customers. The engineering analysis is comparable to an ASHRAE Level 2 audit.

### ***Outreach and Research Activities***

- Maintains internet website with detailed project eligibility, procedures, and application forms
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor and RCx Agents, project requirements, incentive information, and the application and reporting process

## **Retail Electric Provider MTP**

### ***Program Design***

This program offers energy saving products and services to end use residential and/or commercial customers through participating Retail Electric Providers (REPs). Participating REPs market the energy saving measures and services to their customers in the CenterPoint Energy Houston Electric (CEHE) service territory. REPs can participate in any or all of the following programs:

- CoolSaver A/C Tune-up Program – Residential
- CoolSaver A/C Tune-up Program – Commercial
- Efficiency Connection Electronic Marketplace

### **CoolSaver A/C Tune-Up Program – Residential and Commercial**

The CoolSaver A/C Tune-up program utilizes specially trained air conditioning contractors to perform comprehensive A/C tune-ups for residential, residential income qualified and commercial customers. The program pays incentives to the A/C contractor to reduce the customer's upfront cost of system diagnosis and correction. It also provides participating trade allies with training on best practices and discounts on high quality diagnostic tools.

### **Efficiency Connection**

Efficiency Connection is an online marketplace that enables customers to shop for discounted energy efficiency products. Through the program's third-party vendor, products are delivered directly to qualifying residential customers. Program marketing informs the customer of the importance of installing LED's in high use areas and replacing existing incandescent, fluorescent and halogen lamps to increase savings.

### ***Implementation Process***

The Retail Electric Provider program works with local REPs to recruit and enroll customers. Incentives are paid to program service providers or contractors for the average verified demand and energy savings achieved through the program.

### ***Outreach and Research Activities***

- Contracts with a third-party program implementer to implement outreach and planning activities
- REPs market the program to existing customers via e-mail, phone calls, social media and direct mail

## **Smart Thermostat (Pilot)**

### ***Program Design***

The Smart Thermostat was launched in the fourth quarter of 2018 to coincide with the holiday shopping season and will continue in 2019. The program utilizes an online marketplace promoted by REPs that enables customers to shop for discounted energy efficiency products. In addition, an internet portal was launched which offers an instant coupon code sent directly to customers to reduce the price of eligible devices at participating retailers. Eligible devices are limited to Energy Star Certified Smart Thermostats.

### ***Outreach and Research Activities***

- Contracts with third-party internet marketplace and on-line portal companies
- Implements in-store marketing materials with participating retailers

## **Residential Demand Response (SOP)**

### ***Program Design***

The Residential Demand Response program provides demand reduction during the summer peak period, when ERCOT issues an EEA2. Participants are tested twice during the summer peak period and are available for up to five additional demand response events. Events may last from one to four hours and may be initiated Monday through Friday between the hours of 1:00 pm and 7:00 pm. The program begins June 1 and ends on September 31.

### ***Implementation process***

The Residential Demand Response program utilizes CenterPoint Houston's internal tracking database to enroll customers who own a Wi-Fi enabled device that can provide curtailment during energy saving events.

### ***Outreach and Research Activities***

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors
- CenterPoint Houston works with aggregators and vendors to enroll customers who wish to participate

## **CenterPoint Energy High Efficiency Home MTP**

### ***Program Design***

The High Efficiency Home MTP incentivizes the construction of new ENERGY STAR certified and other high efficiency qualified homes. To qualify for incentives, all homes at a minimum must achieve 10% or 1000 more kWh savings over the 2015 IECC reference baseline home. Incentives can also be earned by meeting minimum prescriptive technology requirements such as high efficiency HVAC systems, and above code attic and wall insulation. An additional bonus will be offered for those builders who build ENERGY STAR® version 3.1 certified homes. Each home is reviewed for verifiable demand and energy savings.

### ***Outreach and Research Activities***

- Contracts with a third-party program implementer to implement outreach, training and technical assistance
- Advertise using a multitude of media, including billboards, digital media radio, TV, search engine optimization, online and targeted relocation publications, as well as local home builder association publications.

## **Residential Standard Offer Program (SOP)**

### ***Program Design***

The Residential SOP targets retrofit measures for residential customers with incentives being paid to project sponsors, for qualifying measures that provide verifiable demand and energy savings. The program is open to all qualifying energy efficiency measures, including, but not limited to: air conditioning, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

### ***Outreach and Research Activities***

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors

## **Advanced Lighting MTP**

### ***Program design***

This program offers point of purchase discounts to residential customers at participating retail stores for the purchase of qualified (i.e., ENERGY STAR® rated) high efficiency LED lighting products.

***Implementation process***

The Advanced Lighting MTP is implemented by a third-party program implementer. Point of purchase discounts will be applied to residential customers at participating retailers, including Home Depot, Lowes, and Sam's Club. 5% of the savings and cost associated with the Advanced Lighting MTP will be allocated to the commercial sector. The program is administered as a single program, but the savings and cost are detailed by segment throughout this document.

***Outreach and Research activities***

- In-store promotions of the program via signage
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

**Mid-Stream MTP*****Program design***

The A/C and Pool Pump Mid-Stream MTP provides incentives to air conditioning and pool pump distributors who agree to facilitate the installation of high-efficiency pool pumps, air conditioners and heat pumps in existing single-family and multi-family properties.

***Implementation process***

Any registered A/C distributor or pool pump distributor may apply for participation in the program. Program information is provided on CenterPoint Houston's website.

***Outreach and Research activities***

- Contracts with a third-party program implementer to implement outreach and planning activities
- Conduct workshops as necessary to explain elements such as responsibilities of the distributors and contractors, program requirements, incentive information, and the application and reporting process

**Hard-To-Reach Standard Offer Program (HTR SOP)*****Program Design***

Incentives are paid to project sponsors for qualifying measures installed in retrofit applications which provide verifiable demand and energy savings to customers whose annual total household income is less than 200% of current federal poverty guidelines. Qualifying energy efficiency measures, include but are



not limited to; air conditioning, AC tune-ups, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

### ***Implementation Process***

Any registered project sponsor may submit an application for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

### ***Outreach and Research Activities***

- Maintain an internet website with detailed project eligibility, end-use measures, incentive structure, procedures and application forms
- Conduct workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process

## **Multi-family MTP**

### ***Program Design***

The Multi-family MTP encompasses two programs; Multi-family Water and Space Heating and Multi-Family New Construction MTP. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family buildings.

## **Multi-family HTR MTP**

### ***Program Design***

The Multi-family HTR MTP encompasses three programs; Multi-family Water and Space Heating, Multi-family New Construction MTP, and Direct Install. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family buildings. The Multi-Family Direct Install Program offers property owners and managers a free visual audit of existing units to see if the property is eligible for energy efficient direct install measures, which may include CFLs / LED lights and water saving measures, but is only available to properties that have tenants whose annual total household income is less than 200% of current federal poverty guidelines. If eligible, these measures will be installed at no cost and include an educational component.

### ***Outreach and Research Activities***

- Contracts with a third-party program implementer to implement outreach and planning
- Provide point of purchase materials including yard signs, marketing kits, and brochures to participating developers and property managers

### **Targeted Low-Income MTP (Agencies in Action)**

#### ***Program Design***

The Targeted Low-Income MTP facilitates the installation of energy efficiency upgrades for low-income residential customers in single family or multi-family homes. Local non-profit organizations and energy service companies provide comprehensive, whole-house retrofits that maximize electricity savings to homes with a Savings to Investment Ratio (SIR) greater than one (1). This is accomplished by installing attic insulation, solar screens, lighting retrofits, water saving measures, ENERGY STAR® room air conditioners, central air conditioning systems, ENERGY STAR® refrigerators, duct efficiency improvement and air infiltration control for participants that have an annual household income of less than 200% of the federal poverty guidelines. A maximum expenditure of \$6,500 is allowed per home.

#### ***Implementation Process***

CenterPoint Houston contracts with a program implementer that has the responsibility of recruiting and overseeing the participating agencies and energy service companies. An energy audit using the National Energy Audit Assessment Tool (NEAT) is performed at the premise and the SIR score determines which projects are selected for renovation.

### ***Outreach and Research Activities***

- Partner with a 3<sup>rd</sup> party implementer
- Contact non-profit organizations for potential participation

### **Research and Development (R&D) Projects**

In 2019 CenterPoint Houston plans to implement the following R&D projects. Additional projects may be implemented depending on research opportunities and the availability of budgeted R&D funds.

#### **Project Tracking System**

The contract for our existing project tracking system, customer portal, and energy efficiency database

was extended in 2018 for a second year, set to expire at the end of 2019, so that a competitively bid process could identify an upgrade or a replacement of the system to be implemented in 2019.

### **C. New Programs for 2019**

CenterPoint Houston does not plan to implement any new programs in 2019.

We do, however, expect to partner with the City of Houston and leverage their housing recovery program to encourage the replacement of aging central AC/resistance heat systems with high-efficiency heat pumps for low-income residents at multi-family properties.

### **D. Potential New Programs for 2020**

#### **Smart Home Energy Management System (SHEM) Pilot Program**

CenterPoint Houston is planning to implement this pilot program in 2020 to determine the market potential and verifiable energy savings associated with Smart Home Energy Management Systems (SHEMs) and their related technologies. This pilot would integrate hardware such as thermostats, plugs, lighting, and other controls with internet connectivity, new software, and advanced analytics to validate energy savings potential. "Smart" Technology and Home Energy Management Systems is a rapidly growing industry that is valued by consumers and this technology could create a pipeline of "demand response ready" homes. If a deemed savings measure is created and approved, it could be incorporated in multiple programs as a measure for new construction and retrofit projects.

## II. Customer Classes

CenterPoint Houston's energy efficiency programs target the Hard-to-Reach, Residential, and Commercial customer classes.

The annual MW savings goal will be allocated to customer class by examining historical program results, evaluating economic trends, and considering Substantive Rule § 25.181, which state that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers and no less than 10% of the energy efficiency budget is to be spent on targeted low-income programs. Table 3 summarizes the number of customers in each of the customer classes. It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace and the overriding objective of meeting legislative and Commission goals.

**Table 3: Summary of Customer Classes**

<b>Customer Class</b>	<b>Number of Customers</b>
Commercial	286,984
Residential	1,484,242
Hard to Reach <sup>5</sup>	713,983

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<sup>5</sup> CenterPoint Houston does not require income information for electric service and no records are available to correlate revenue for the Hard-to-Reach customer class. However, according to the U.S. Census Bureau, Current Population Survey 2018 Annual Social and Economic Supplement, 32.48% of Texas families fall below 200% of the poverty threshold. Applying that percentage to CenterPoint Houston's residential customer totals, the number of HTR customers is estimated at 713,983. Program goals will be based on the requirement in the energy efficiency rule that no less than 5% of the total energy efficiency demand goal will be achieved through the programs in the Hard-to-Reach customer class.

### **III. Energy Efficiency Goals and Projected Savings**

As prescribed by Substantive Rule § 25.181, and because CenterPoint Houston satisfied its goal to meet 30% of its five-year average rate of growth in demand in 2013, its demand goal for 2019 is 0.4% of peak demand. For the purposes of this report, the 2019 demand goal is based on the 5-year average of weather adjusted peak demand for 2013-2017 and the 2020 demand goal is based on the 5-year average of weather adjusted peak demand for 2014-2018. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the demand savings goals.

Table 4 presents historical annual peak demand for 2013-2018 and estimated peak demand for 2019 and 2020. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2019 and 2020. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. The MW and MWh values presented in table 5 are at the customer meter and include line loss values approved in the latest CenterPoint Energy Houston Electric rate case, Docket 38339.

**Table 4: Annual Growth in Demand and Energy Consumption**

Calendar Year	Peak Demand (MW)				Energy Consumption (GWh)			
	Total System		Residential & Commercial		Total System		Residential & Commercial	
	Actual <sup>6</sup>	Weather Adjusted <sup>7,8</sup>	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted
2013	17,012	16,925	14,894	14,981	84,431	84,616	83,533	83,718
2014	16,592	17,032	14,692	15,131	86,159	87,044	68,420	69,680
2015	18,056	17,768	15,960	15,672	88,232	88,326	71,013	71,107
2016	17,957	18,201	15,731	15,975	91,322	91,336	72,022	72,036
2017	18,364	18,611	16,236	15,665	92,593	93,480	76,652	72,449
2018	19,125	18,662	16,726	16,078	93,856	94,889	72,635	73,435
2019	18,915	N/A <sup>9</sup>	16,525	N/A	93,856	N/A	73,929	N/A
2020	19,460		16,777		97,175		75,053	

2019 Goals<sup>10</sup>

MW Goal =  $15,485 \times 0.4\% = 61.94\text{MW}$

MWh Goal =  $61.94\text{MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 108,519\text{MWh}$

## 2020 Goals

MW Goal =  $15,704 \times 0.4\% = 62.82\text{MW}$

MWh Goal =  $62.82\text{MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 110,061\text{MWh}$

<sup>6</sup> 2019 and 2020 Calendar Year “Actual” values are forecasted.

<sup>7</sup> “Actual Weather Adjusted” Peak Demand is “Actual” Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

<sup>8</sup> Weather adjustment calculations are based on hourly weather data from NOAA’s Quality Controlled Local Climatological Data (QCLCD).

<sup>9</sup> NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand

<sup>10</sup> Demand goals for 2019 and 2020 are provided at the meter level. Source level demand goals are 65.12 MW for 2019 and 66.04 MW for 2020. The source values were determined by applying a line loss factor of 5.13%

**Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)**

Program Goals by Customer Class for 2019 and 2020	2019		2020	
	Projected Savings (KW) at Meter	Projected Savings (kWh) at Meter	Projected Savings (kW) at Meter	Projected Savings (kWh) at Meter
<b>Large Commercial</b>	<b>121,581</b>	<b>137,131,254</b>	<b>120,275</b>	<b>127,713,774</b>
Commercial Standard Offer Program (SOP)	13,846	79,384,615	11,700	75,000,000
Commercial MTP (SCORE, Healthcare, Data Center)	7,700	41,800,000	7,100	40,000,000
Commercial Load Management (SOP)	98,000	590,000	98,000	590,000
Retro-Commissioning MTP	1,652	14,000,000	3,100	10,800,000
REP (Commercial CoolSaver)	226	699,341	226	699,341
Advanced Lighting Commercial	156	657,298	149	624,433
<b>Residential and Small Commercial</b>	<b>33,053</b>	<b>43,536,833</b>	<b>35,632</b>	<b>52,855,638</b>
REP (Residential CoolSaver and Efficiency Connection)	2,280	6,910,672	1,900	5,900,000
Residential Demand Response SOP	17,550	105,300	17,550	105,300
Residential & Small Commercial (SC) SOP	952	1,740,893	660	1,200,000
Smart Thermostat Program (Pilot)	500	2,400,000	-	4,470,000
Advanced Lighting Residential	2,972	12,488,663	2,823	11,864,230
Mid-Stream MTP (A/C and Pool Pump Distributor)	1,379	3,790,617	3,500	9,855,000
Multi-Family Market Rate MTP	1,012	1,100,689	1,199	1,914,570
CenterPoint Energy High Efficiency Homes MTP	6,408	15,000,000	8,000	17,500,000
Smart Home Energy Management System (Pilot)	NA	NA	-	46,538
<b>Hard-to-Reach</b>	<b>4,616</b>	<b>7,562,854</b>	<b>5,850</b>	<b>8,912,129</b>
Hard-to-Reach SOP	1,876	3,668,810	876	97,700
Multi-Family MTP HTR	1,168	1,135,539	597	1,286,082
Targeted Low Income MTP (Agencies in Action)	1,572	2,758,505	4,377	7,528,347
<b>TOTAL</b>	<b>159,246</b>	<b>188,026,946</b>	<b>161,757</b>	<b>189,401,501</b>

#### IV. Program Budgets

Table 6 presents proposed budget allocations required to achieve the projected demand and energy savings for calendar years 2019 and 2020. The budget allocations are a result of the projected demand and energy savings presented in Table 5. The budget allocations presented in Table 6 include incentive and administration costs for each program and customer class.

**Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class**

Program Estimated Budget by Customer Class for 2019 and 2020	2019			2020		
	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget
<b>Large Commercial</b>	<b>\$15,780,000</b>	<b>\$1,929,019</b>	<b>\$17,709,019</b>	<b>\$16,877,250</b>	<b>\$2,039,324</b>	<b>\$18,916,574</b>
Commercial Standard Offer Program (SOP)	\$6,000,000	\$843,917	\$6,843,917	\$5,000,000	\$703,264	\$5,703,264
Commercial MTP (SCORE, Healthcare, Data Center)	\$5,500,000	\$642,206	\$6,142,206	\$7,200,000	\$840,706	\$8,040,706
Commercial Load Management (SOP)	\$3,300,000	\$323,112	\$3,623,112	\$3,300,000	\$323,112	\$3,623,112
Retro-Commissioning MTP	\$800,000	\$105,406	\$905,406	\$1,200,000	\$158,109	\$1,358,109
REP (Commercial CoolSaver)	\$125,000	\$9,461	\$134,461	\$125,000	\$9,461	\$134,461
Advanced Lighting Commercial	\$55,000	\$4,918	\$59,918	\$52,250	\$4,673	\$56,923
<b>Residential and Small Commercial</b>	<b>\$11,345,000</b>	<b>\$1,293,271</b>	<b>\$12,638,271</b>	<b>\$11,042,750</b>	<b>\$1,288,646</b>	<b>\$12,331,396</b>
REP (Residential CoolSaver and Efficiency Connection)	\$1,500,000	\$119,783	\$1,619,783	\$1,300,000	\$103,812	\$1,403,812
Residential Demand Response SOP	\$900,000	\$72,800	\$972,800	\$900,000	\$72,800	\$972,800
CenterPoint Energy High Efficiency Homes MTP	\$3,600,000	\$452,706	\$4,052,706	\$3,600,000	\$452,706	\$4,052,706
Residential & Small Commercial (SC) SOP	\$500,000	\$94,319	\$594,319	\$350,000	\$66,023	\$416,023
Advanced Lighting Residential	\$1,045,000	\$93,450	\$1,138,450	\$992,750	\$88,778	\$1,081,528
Mid-Stream MTP (A/C and Pool Pump Distributor)	\$2,300,000	\$313,309	\$2,613,309	\$2,500,000	\$340,553	\$2,840,553
Multi-Family Market Rate MTP	\$1,000,000	\$51,903	\$1,051,903	\$600,000	\$31,142	\$631,142
Smart Thermostat Program (Pilot)	\$500,000	\$95,000	\$595,000	\$500,000	\$95,000	\$595,000
Smart Home Energy Management System (Pilot)	NA	NA	NA	\$300,000	\$37,832	\$337,832
<b>Hard-to-Reach</b>	<b>\$6,000,000</b>	<b>\$1,050,315</b>	<b>\$7,050,315</b>	<b>\$5,200,000</b>	<b>\$873,021</b>	<b>\$6,073,021</b>
Hard-to-Reach SOP	\$1,000,000	\$255,537	\$1,255,537	\$500,000	\$127,769	\$627,769
Multi-Family MTP HTR	\$500,000	\$51,903	\$551,903	\$500,000	\$51,903	\$551,903
Targeted Low Income MTP (Agencies in Action)	\$4,500,000	\$742,875	\$5,242,875	\$4,200,000	\$693,350	\$4,893,350
<b>SUB TOTAL</b>	<b>\$33,125,000</b>	<b>\$4,272,605</b>	<b>\$37,397,605</b>	<b>\$33,120,000</b>	<b>\$4,200,991</b>	<b>\$37,320,991</b>
Research and Development		\$500,000	\$500,000		\$500,000	\$500,000
<b>PROGRAM TOTAL</b>	<b>\$33,125,000</b>	<b>\$4,772,605</b>	<b>\$37,897,605</b>	<b>\$33,120,000</b>	<b>\$4,700,991</b>	<b>\$37,820,991</b>
<b>EM&amp;V</b>			<b>\$541,294</b>			<b>\$541,294</b>
<b>EECHP PROGRAM TOTAL</b>			<b>\$38,438,899</b>			<b>\$38,362,285</b>



## Energy Efficiency Report

### V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

Table 7 documents CenterPoint Houston's actual demand goals and energy targets for the previous five years (2014 – 2018). Each value was calculated using the methods outlined in Substantive Rule § 25.181.

**Table 7: Historical Demand and Energy Savings Goals (at Meter) <sup>6</sup>**

<b>Calendar Year</b>	<b>Actual Weather Adjusted Demand Goal at Meter (MW)</b>	<b>Actual Weather Adjusted Energy Goals at Meter (MWh)</b>	<b>Actual Demand Savings at Meter (MW)</b>	<b>Actual Weather Adjusted Energy Savings at Meter (MWh)</b>
<b>2018<sup>11</sup></b>	61.42	107,608.00	177.18	164,363.87
<b>2017</b>	60.42	105,855.84	188.44	183,491.15
<b>2016</b>	59.40	104,314.00	167.70	190,892.42
<b>2015</b>	58.83	103,069.00	168.49	188,255.21
<b>2014</b>	55.73	97,639.00	159.19	153,170.39

<sup>11</sup> 2018 Portfolio demand savings at the source level total 186.27 MW. The line loss values for each rate class approved in Docket 38339 were weighted according to 2018 program participation to arrive at a final line loss value of 5.13%. This value was applied to the meter level portfolio demand savings to determine savings at the source level.

## VI. Projected Savings, Reported and Verified Demand and Energy Savings

Table 8 breaks out the projected savings verified and reported demand energy savings by customer class for each program. The projected savings were reported in the Energy Efficiency Plan filed in March of 2018. The verified and reported savings are those savings that have been achieved and verified in 2018 calendar year.

**Table 8: Projected Savings versus Verified and Reported Savings for 2018 (at Meter)**

	2018					
	Projected Savings		Verified Savings		Reported / Verified	
	kW	kWh	kW	kWh	kW	kWh
<b>Large Commercial</b>	<b>121,975</b>	<b>139,747,016</b>	<b>126,241.9</b>	<b>88,074,833.0</b>	<b>126,241.9</b>	<b>88,074,833.0</b>
Commercial Standard Offer Program (SOP)	15,000	86,000,000	6,555.2	40,412,439.0	6,555.2	40,412,439.0
Commercial MTP (SCORE, Healthcare, Data Center)	7,000	38,000,000	6,995.6	39,864,189.8	6,995.6	39,864,189.8
Commercial Load Management (SOP)	98,000	590,000	110,625.9	663,755.5	110,625.9	663,755.5
Retro-Commissioning MTP	1,652	14,000,000	1,426.7	5,108,766.0	1,426.7	5,108,766.0
REP (Commercial CoolSaver)	181	559,472	313.0	422,182.0	313.0	422,182.0
Advanced Lighting Commercial	142	597,544	325.4	1,603,500.7	325.4	1,603,500.7
<b>Residential and Small Commercial</b>	<b>35,015</b>	<b>44,351,721</b>	<b>44,849.8</b>	<b>66,716,720.3</b>	<b>44,849.8</b>	<b>66,716,720.3</b>
REP (Residential CoolSaver and Efficiency Connection)	3,344	10,135,652	1,605.1	4,574,602.5	1,605.1	4,574,602.5
Residential Demand Response SOP	19,500	117,000	19,481.4	117,410.8	19,481.4	117,410.8
Residential & Small Commercial (SC) SOP	952	1,740,893	486.1	1,030,029.4	486.1	1,030,029.4
Smart Thermostat Program (Pilot)	250	1,200,000	0.0	388,592.0	0.0	388,592.0
Advanced Lighting Residential	2,702	11,353,330	6,183.4	30,466,512.8	6,183.4	30,466,512.8
Residential A/C and Pool Pump Distributor MTP	1,379	3,790,617	2,850.4	6,977,205.1	2,850.4	6,977,205.1
Multi-Family Market Rate MTP	658	1,430,896	1,095.0	1,914,471.7	1,095.0	1,914,471.7
CenterPoint Energy High Efficiency Homes MTP	6,230	14,583,333	13,148.4	21,247,896.0	13,148.4	21,247,896.0
<b>Hard-to-Reach</b>	<b>4,565</b>	<b>7,198,565</b>	<b>6,089.0</b>	<b>9,572,321.5</b>	<b>6,089.0</b>	<b>9,572,321.5</b>
Hard-to-Reach SOP	1,876	3,668,810	1,397.1	1,862,128.4	1,397.1	1,862,128.4
Multi-Family MTP HTR	1,519	1,476,201	517.7	964,202.7	517.7	964,202.7
Targeted Low Income MTP (Agencies in Action)	1,170	2,053,554	4,174.3	6,745,990.4	4,174.3	6,745,990.4
<b>TOTAL</b>	<b>161,525</b>	<b>191,257,308</b>	<b>177,186.7</b>	<b>184,358,744.7</b>	<b>177,186.7</b>	<b>184,358,744.7</b>

**Table 9: Projected Savings versus Reported and Verified Savings for 2017 (at Meter)**

	2017					
	Projected Savings		Verified Savings		Reported / Verified	
	MW	MWh	MW	MWh	MW	MWh
<b>Large Commercial</b>	<b>123.80</b>	<b>147,112.43</b>	<b>138.82</b>	<b>86,424.41</b>	<b>138.82</b>	<b>86,424.41</b>
Commercial Standard Offer Program (SOP)	16.13	88,316.54	7.34	44,919.00	7.34	44,919.00
Commercial MTP (SCORE, Healthcare)	4.38	25,938.38	4.43	29,649.15	4.43	29,649.15
Commercial Load Management (SOP)	98.41	590.47	125.56	751.94	125.56	751.94
Retro-Commissioning MTP	1.91	14,742.91	0.17	2,111.42	0.17	2,111.42
Sustainable Schools	0.67	2,127.64	0.47	3,661.66	0.47	3,661.66
REP (Commercial CoolSaver)	0.77	2,377.76	0.13	222.40	0.13	222.40
Advanced Lighting Commercial	0.13	537.79	0.19	947.50	0.19	947.50
Data Centers Program	1.40	12,480.94	0.54	4,161.35	0.54	4,161.35
<b>Residential and Small Commercial</b>	<b>34.62</b>	<b>42,862.78</b>	<b>44.17</b>	<b>89,431.94</b>	<b>44.17</b>	<b>89,431.94</b>
CenterPoint Energy High Efficiency Homes MTP	6.23	14,583.33	15.71	51,344.88	15.71	51,344.88
Residential & Small Commercial (SC) SOP	0.95	1,740.89	0.07	134.76	0.07	134.76
Advanced Lighting Residential	2.43	10,218.00	3.60	18,002.48	3.60	18,002.48
Residential & SC A/C Distributor MTP	0.88	2,138.14	2.94	7,700.02	2.94	7,700.02
REP (Residential CoolSaver and Efficiency Connection)	3.30	10,023.50	1.85	5,292.18	1.85	5,292.18
Residential Demand Response SOP	19.50	117.00	17.19	103.15	17.19	103.15
Multi-Family Market Rate MTP	0.66	1,430.90	1.62	2,794.74	1.62	2,794.74
Smart Pool Program Residential	0.45	1,526.70	0.72	2,757.33	0.72	2,757.33
Energy Wise Resource Action MTP	0.22	1,084.32	0.47	1,302.39	0.47	1,302.39
<b>Hard-to-Reach</b>	<b>4.61</b>	<b>7,334.89</b>	<b>5.43</b>	<b>7,582.50</b>	<b>5.43</b>	<b>7,582.50</b>
Hard-to-Reach SOP	1.88	3,668.81	0.54	587.20	0.54	587.20
Multi-Family MTP HTR	1.52	1,476.20	1.04	991.27	1.04	991.27
Targeted Low Income MTP (Agencies in Action)	1.17	2,053.55	3.86	6,004.03	3.86	6,004.03
REP (CoolSaver Income Qualified)	0.05	136.33	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>162.03</b>	<b>197,316.39</b>	<b>188.42</b>	<b>183,459.44</b>	<b>188.42</b>	<b>183,459.44</b>

## VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2014 – 2018) broken out by program for each customer class. Administrative costs do not include Evaluation Measurement and Verification (EM&V) or rate case expenses.

**Table 10: Historical Program Incentive and Administrative Expenditures (2014 – 2018)<sup>10</sup>**

Historical Statutory Program Funding by Customer Class	2018		2017		2016		2015		2014	
	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
<b>Large Commercial</b>	<b>\$13,339,628</b>	<b>\$1,825,309</b>	<b>\$13,090,927</b>	<b>\$1,621,148</b>	<b>\$14,984,848</b>	<b>\$1,874,746</b>	<b>\$15,297,984</b>	<b>\$1,808,656</b>	<b>\$14,527,295</b>	<b>\$2,146,049</b>
Commercial Standard Offer Program (SOP)	\$3,353,840	\$897,987	\$4,239,883	\$846,554	\$5,932,906	\$973,862	\$6,283,259	\$795,079	\$6,335,962	\$1,087,653
Retro-Commissioning MTP	\$997,678	\$161,328	\$298,214	\$46,658	\$451,417	\$52,715	\$464,977	\$48,338	\$260,367	\$43,365
Commercial MTP (SCORE, Healthcare)	\$4,578,362	\$392,771	\$4,229,468	\$304,518	\$3,641,919	\$366,294	\$3,216,713	\$386,926	\$3,015,795	\$400,337
Commercial Load Management (SOP)	\$3,346,334	\$264,402	\$3,027,561	\$261,179	\$3,106,220	\$327,570	\$3,244,409	\$346,571	\$3,506,366	\$396,980
Sustainable Schools	N/A	N/A	\$344,898	\$22,450	\$334,782	\$28,914	\$357,537	\$49,264	\$319,547	\$55,048
Advanced Lighting Commercial	\$54,134	\$5,265	\$46,267	\$2,438	N/A	N/A	N/A	N/A	\$601,336	\$108,094
REP (Commercial CoolSaver)	\$113,636	\$27,209	\$75,000	\$44,342	\$400,300	\$30,474	\$397,350	\$45,679	\$487,922	\$54,572
Pool Pump Program Commercial	N/A	N/A	N/A	N/A	\$119,576	\$12,377	\$100,247	\$11,489	N/A	N/A
Data Centers Program	\$895,643	\$76,347	\$829,634	\$93,008	\$997,729	\$82,540	\$1,233,493	\$125,310	N/A	N/A
<b>Residential and Small Commercial</b>	<b>\$8,942,381</b>	<b>\$1,082,326</b>	<b>\$10,820,380</b>	<b>\$1,022,888</b>	<b>\$9,832,154</b>	<b>\$1,126,186</b>	<b>\$11,659,302</b>	<b>\$1,308,234</b>	<b>\$10,275,021</b>	<b>\$1,224,176</b>
CenterPoint Energy High Efficiency Homes MTP	\$3,519,955	\$361,655	\$3,677,205	\$277,696	\$2,636,756	\$339,312	\$3,892,457	\$399,031	\$4,064,036	\$466,162
Residential & Small Commercial (SC) SOP	\$271,258	\$82,472	\$35,832	\$107,863	\$79,596	\$31,791	\$300,720	\$61,320	\$254,477	\$41,964
Advanced Lighting Residential	\$1,028,549	\$100,040	\$879,069	\$46,330	\$943,324	\$74,665	\$843,658	\$108,397	\$772,689	\$81,713
Multi-Family Market Rate MTP	\$405,322	\$80,251	\$443,524	\$95,973	\$462,168	\$28,541	\$506,714	\$48,463	\$472,690	\$70,662
Residential & SC A/C Distributor MTP	\$1,582,460	\$170,433	\$2,144,829	\$168,246	\$1,968,257	\$201,245	\$2,173,535	\$210,007	\$1,906,639	\$228,715
Smart Pool Program Residential	\$84,846	\$9,138	\$682,501	\$25,149	\$550,894	\$63,589	\$582,718	\$87,710	\$83,400	\$13,668
Smart Thermostat Program (Pilot)	\$159,256	\$43,485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Energy Wise Resource Action MTP	N/A	N/A	\$499,992	\$31,293	\$502,515	\$103,808	\$657,801	\$89,390	\$666,317	\$78,607
REP (CoolSaver, Eff. Connection & Demand Response)	\$1,890,734	\$234,851	\$2,457,428	\$270,339	\$2,688,643	\$283,236	\$2,701,700	\$303,916	\$1,951,523	\$218,283
Home Performance with ENERGY STAR®	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$103,250	\$24,402
<b>Hard-to-Reach</b>	<b>\$4,861,962</b>	<b>\$457,654</b>	<b>\$4,265,535</b>	<b>\$477,199</b>	<b>\$4,488,903</b>	<b>\$481,142</b>	<b>\$4,844,189</b>	<b>\$521,843</b>	<b>\$6,386,605</b>	<b>\$770,007</b>
Hard-To-Reach SOP	\$1,075,289	\$109,943	\$320,078	\$129,723	\$245,907	\$111,156	\$971,292	\$160,463	\$606,341	\$118,105
Multi-Family MTP HTR	\$313,017	\$80,245	\$286,980	\$88,796	\$554,407	\$48,936	\$447,330	\$49,039	\$279,358	\$39,808
Res HTR - Afford Home	N/A	N/A	N/A	N/A	N/A	N/A	\$3,529	\$312	\$20,295	\$3,591
Targeted Low Income MTP (Agencies in Action)	\$3,473,656	\$267,466	\$3,658,477	\$258,680	\$3,656,549	\$318,396	\$3,360,588	\$303,786	\$5,480,611	\$608,503
REP (CoolSaver Income Qualified)	N/A	N/A	\$0	\$0	\$32,040	\$2,655	\$61,450	\$8,243	N/A	N/A
Research and Development		\$0	\$0	\$122,775		\$322,930		\$392,784	\$0	\$435,563
<b>TOTAL</b>	<b>\$37,023,906</b>	<b>\$4,365,291</b>	<b>\$42,777,242</b>	<b>\$4,522,614</b>	<b>\$49,305,800</b>	<b>\$5,322,902</b>	<b>\$55,580,025</b>	<b>\$6,020,427</b>	<b>\$64,149,911</b>	<b>\$7,573,794</b>

<sup>10</sup> 2018 actual spending taken from Table 11 in the current EEPR; 2017, 2016, 2015, and 2014 actual spending from the 2018 EEPR filed under Project 48146.

## VIII. Program Funding for Calendar Year 2018

As shown on Table 11, CenterPoint Houston spent a total of \$30,509,259 on energy efficiency programs in 2018. This was less than the budgeted \$36,435,833. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Commercial Standard Offer Program was 43% underspent. 2018 underspending is due to an increase in smaller projects that yield lower impacts and incentive spending. Several large projects were delayed in 2018, but these projects will be completed in 2019.
- The Commercial MTP was able to allocate some of the unspent CSOP funding program to schools participating in SCORE
- The Retro-Commissioning Market Transformation Program spent an additional 28% as several projects not completed in 2017 came to fruition in 2018.
- The Commercial CoolSaver program was underspent by 31%. CenterPoint Houston is working through other avenues to promote this program due to lack of interest from REPs.
- The Residential CoolSaver program was underspent by 22% due to a cooler spring and early fall as well as a slow start in the program launch due to contractual issues with the implementer.
- Residential Standard Offer Program has seen a decline in spending due to more stringent requirements for certain measures such as duct efficiency and weatherization, as well as a lack of interest from ceiling insulation contractors. This lead to an 40% underrun in budget, and the excess funding was moved to other programs.
- The Mid-Stream Program underspent by 57% due to a late start from the implementer caused by delays in contract renewal.
- The Residential Demand Response Program spent an additional 22%
- The Multi-Family MTP spent an additional 31%. The Multi-Family HTR MTP was underspent by 45% due to the slowdown of the affordable housing market and delayed projects.
- The Smart Thermostat Program spent an additional 63% due to a successful launch of the online marketplace.

Table 11: Program Funding for Calendar Year 2018

Program Funding for Calendar Year 2018	Number of Customer Meters	Forecasted Budget	Actuals Funds Expended (Incentives)	Actuals Funds Expended (Admin)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)	Percentage Change From Budgeted/ Actual
<b>Large Commercial</b>	<b>871</b>	<b>\$ 17,688,623</b>	<b>\$ 13,339,627</b>	<b>\$ 1,825,309</b>	<b>\$ 15,164,936</b>	<b>\$ -</b>	<b>\$ (2,523,687)</b>	<b>86%</b>
Commercial Standard Offer Program (SOP)	416	\$ 7,414,243	\$ 3,353,840	\$ 897,987	\$ 4,251,827	\$ -	\$ (3,162,416)	57%
Commercial MTP (SCORE, Healthcare, Data Center)	218	\$ 5,583,823	\$ 5,474,005	\$ 469,118	\$ 5,943,123	\$ -	\$ 359,300	106%
Commercial Load Management (SOP)	208	\$ 3,623,112	\$ 3,346,334	\$ 264,402	\$ 3,610,736	\$ -	\$ (12,376)	100%
Retro-Commissioning MTP	12	\$ 905,406	\$ 997,678	\$ 161,328	\$ 1,159,006	\$ -	\$ 253,600	128%
REP (Commercial CoolSaver)	17	\$ 107,568	\$ 113,636	\$ 27,209	\$ 140,845	\$ -	\$ 33,277	131%
Advanced Lighting Commercial	N/A	\$ 54,471	\$ 54,134	\$ 5,265	\$ 59,399	\$ -	\$ 4,928	109%
<b>Residential and Small Commercial</b>	<b>37,401</b>	<b>\$ 12,546,170</b>	<b>\$ 8,942,381</b>	<b>\$ 1,082,326</b>	<b>\$ 10,024,707</b>	<b>\$ -</b>	<b>\$ (2,521,463)</b>	<b>80%</b>
CenterPoint Energy High Efficiency Homes MTP	12,769	\$ 3,940,131	\$ 3,519,955	\$ 361,655	\$ 3,881,611	\$ -	\$ (58,520)	99%
Residential & Small Commercial (SC) SOP	659	\$ 594,319	\$ 271,258	\$ 82,472	\$ 353,730	\$ -	\$ (240,589)	60%
Advanced Lighting Residential	N/A	\$ 1,034,955	\$ 159,256	\$ 43,485	\$ 202,741	\$ -	\$ (832,214)	20%
Residential A/C and Pool Pump Distributor MTP	2,322	\$ 2,613,309	\$ 1,028,549	\$ 100,040	\$ 1,128,590	\$ -	\$ (1,484,719)	43%
REP (Residential CoolSaver and Efficiency Connection)	4,725	\$ 2,375,682	\$ 1,667,306	\$ 179,571	\$ 1,846,877	\$ -	\$ (528,805)	78%
Residential Demand Response SOP	15,143	\$ 972,800	\$ 1,052,474	\$ 133,852	\$ 1,186,326	\$ -	\$ 213,526	122%
Multi-Family Market Rate MTP	1,457	\$ 717,474	\$ 838,260	\$ 100,999	\$ 939,260	\$ -	\$ 221,786	131%
Smart Thermostat Program (Pilot)	326	\$ 297,500	\$ 405,322	\$ 80,251	\$ 485,573	\$ -	\$ 188,073	163%
<b>Hard-to-Reach</b>	<b>4,900</b>	<b>\$ 5,876,040</b>	<b>\$ 4,861,962</b>	<b>\$ 457,654</b>	<b>\$ 5,319,615</b>	<b>\$ -</b>	<b>\$ (556,425)</b>	<b>91%</b>
Hard-to-Reach SOP	755	\$ 1,255,537	\$ 1,075,289	\$ 109,943	\$ 1,185,232	\$ -	\$ (70,305)	94.4%
Multi-Family MTP HTR	2,624	\$ 717,474	\$ 313,017	\$ 80,245	\$ 393,262	\$ -	\$ (324,212)	55%
Targeted Low Income MTP (Agencies in Action)	1,521	\$ 3,903,029	\$ 3,473,656	\$ 267,466	\$ 3,741,121	\$ -	\$ (161,908)	96%
<b>SUB TOTAL</b>	<b>43,172</b>	<b>\$ 36,110,833</b>	<b>\$ 27,143,970</b>	<b>\$ 3,365,289</b>	<b>\$ 30,509,259</b>	<b>\$ -</b>	<b>\$ (5,601,574)</b>	<b>84%</b>
Research and Development		\$ 325,000	\$ -	\$ -	\$ -	\$ -	\$ (325,000)	N/A
<b>TOTAL</b>	<b>43,172</b>	<b>\$ 36,435,833</b>	<b>\$ 27,143,970</b>	<b>\$ 3,365,289</b>	<b>\$ 30,509,259</b>	<b>\$ -</b>	<b>\$ (5,926,574)</b>	<b>84%</b>

## **IX. Market Transformation Program Results**

### **The Commercial MTP**

In 2018, CenterPoint Houston projected to acquire 7,000 kW and 38,000,000 kWh savings from the SCORE, HEEP, and DCEEP program offerings included in the Commercial MTP. CenterPoint Houston verified and is reporting a savings of 6,995 kW and 39,864,189 kWh.

**SCORE** - The SCORE program paid incentives to school districts, colleges/universities, municipal governments, county governments, and faith-based organizations reaching a total of 31 customers through 249 projects. Nine of the participating customers were new to the program in 2018. Lighting and chiller measures represented most of the projects that were incentivized in 2018.

SCORE Lite program participation and impacts continue to grow as customers and contractors become better equipped to be self-directed in the program. CenterPoint Houston and the program implementer will continue to promote greater self-reliance for SCORE Lite participants. The program will also focus additional outreach efforts to customer segments that have not participated as heavily in the SCORE/CitySmart program, namely local governments, faith-based organizations, and non-profits.

**HEEP** - HEEP produced strong results in 2018 with a total of 15 projects completed at 12 participating hospitals. The program delivered savings of 1,376 kW and 11,163,354 kWh.

**DCEEP** - In 2018, DCEEP delivered savings of 998 kW and 5,254,702 kWh through the implementation of six projects. Measures incentivized through the program included lighting, cooling equipment, custom HVAC, and uninterruptable power supply.

### **Retro-Commissioning MTP (RCx)**

In 2018, CenterPoint Houston projected to acquire 1,652 kW and 14,000,000 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 1,426 kW and 5,108,766 kWh.

**New Homes MTP**

In 2018, CenterPoint Houston projected to acquire 6,230 kW and 14,583,333 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 13,148 kW and 21,247,896 kWh. This program drives builders to use energy efficient methods in design and construction.

**Advanced Lighting Residential MTP**

In 2018, CenterPoint Houston projected to acquire 2,844 kW and 11,950,874 kWh from this program. CenterPoint Houston verified and is reporting residential savings of 6,183 kW and 30,466,512 kWh, and commercial savings of 142 kW and 597,544 kWh.

**Mid-Stream MTP**

In 2018, the program included 9 distributors that performed over 2,790 HVAC and heat pump change outs. Incentives were increased to encourage sales of 17 SEER and higher, and incentives were reduced for the 16 SEER systems. In 2018, CenterPoint Houston projected to acquire 1,379 kW and 3,790,617 kWh from this program. CenterPoint Houston verified and is reporting savings of 2,850 kW and 6,977,205 kWh.

**Targeted Low-Income MTP (Agencies in Action)**

In 2018, the program reached 1,608 homes in the CenterPoint Houston electric territory. Of these homes, 1,395 were multi-family units and 213 were single family homes. Heat pumps were the leading measure installed and made up most of incentives paid. Other measures installed include: air infiltration, attic insulation, central AC, refrigerator replacement, solar screen, wall insulation, and window AC. In 2018, CenterPoint Houston projected to acquire 1,170 kW and 2,053,554 kWh from this program. 2018 verified and reporting savings totaled 4,174 kW and 6,745,990 kWh.

**Retail Electric Provider Market Transformation Program**

**CoolSaver** - The CoolSaver portion of the REP MTP program provided free comprehensive air conditioning tune-ups to residential, small commercial and income qualified residential customers in the CenterPoint Houston service territory. The program was marketed by fifteen (15) participating REPs. Participating REPs included: Ambit Energy, Amigo Energy, Bounce Energy, Champion Energy



Services, Direct Energy, First Choice Power, Frontier Utilities, Gexa Energy, Hudson Energy, Infinite Energy, Just Energy, Reliant, Tara Energy, TriEagle Energy and Veteran Energy.

Coolsaver tune-ups were performed by twenty-eight (28) specially trained A/C contractors. As a result, 3,734 residential A/C tune-ups and 279 commercial A/C tune-ups were performed in 2018.

**Efficiency Connection** - In 2018, CenterPoint Houston continued the online Efficiency Connection website to promote and deliver energy efficient LED bulbs at a reduced price. The program was marketed by ten (10) participating REPs and yielded 43,783 Energy Star rated LED bulbs. Participating Retail Electric Providers included: Ambit Energy, Amigo Energy, Bounce Energy, Champion Energy Services, Direct Energy, First Choice Power, Gexa Energy, Just Energy, Tara Energy, and TriEagle Energy.

### **Multi-Family MTP Program & Multi-Family HTR MTP Program**

**Water & Space Heating** – The Water & Space Heating portion of the Multi-Family Program promotes the installation of energy efficient non-electric water heating and space heating in housing projects. In 2018, it paid incentives on six apartment complexes with a total of 1,055 units in the CenterPoint Houston service area. Of these units, 120 were classified as Hard-To-Reach and 935 were classified as Market Rate.

**Direct Install** - The Direct Install portion of the Multi-Family Program promotes the installation of energy efficient measures at no cost to the developer, property owner, and tenants. In 2018, it paid incentives on seven apartment complexes with a total of 2,517 units in the CenterPoint Houston service area, all classified as Hard-To-Reach.

**High Efficiency New Construction** - The High Efficiency New Construction program expands the participation to include both low-and mid-rise projects, and to incorporate greater flexibility in estimating and documenting above-code energy savings via additional RESNET accredited energy modeling software tools, and tools that can perform hourly analyses. It incentivized the construction of four market rate properties, with a total of 373 units. One of these four properties also participated in the Water & Space Heating Program, providing additional savings to customers.

Interest in these programs continues to be favorable. A 2019 Program kickoff meeting was held in January to prepare for the several prospective projects. The 2019 Program will largely represent a continuation of

the existing Multi-Family Water & Space Heating, Direct Install, and High Efficiency New Construction program elements.

## **X. Research and Development Results**

In 2018, CenterPoint Houston did not implement any R&D Projects.

## **XI. Administrative Funds Expended**

In 2018, CenterPoint Houston incurred administrative costs on categories such as continued development of its energy efficiency tracking database (eTrack), employees' salaries, training, and travel, purchase of supplies, and other activities necessary and appropriate for successful program implementation. These costs meet the definition of administration costs as defined by the energy efficiency rule under Substantive Rule 25.181(i)(1) that states these type of costs "include all reasonable and necessary costs incurred by the utility in carrying out its responsibilities..." The spending in these cost categories is monitored throughout the year and mid-course corrections are made as necessary to ensure the success of our portfolio.

## **XII. Current Energy Efficiency Cost Recovery Factor (EECRF)**

CenterPoint Houston's 2019 EECRF was approved by the Public Utility Commission of Texas in Docket No. 48420 on December 10, 2018 for the amount of \$39,457,985.

"CenterPoint Houston's 2019 EECRF is approved in the amount of \$39,457,985, which is composed of the following: (a) the estimated 2019 energy-efficiency program costs of \$37,897,605, less an adjustment to reduce the total amount to be collected by \$1,700,000; (b) \$541,294 in certain EM&V costs for 2019; (c) a credit of \$5,705,676 for the over-recovery of 2017 program costs; (d) a credit of \$359 attributed to the lighting class eliminated from the EECRF rider; (e) an adjustment to remove \$420 from 2017 administrative expenses; (f) \$32,281 in 2017 EECRF proceeding expenses; and (g) a performance bonus for 2017 program achievements of \$8,393,259"

## **XIII. Revenue Collected Through EECRF**

In 2018, CenterPoint Houston collected a total of \$46,314,829 in energy efficiency program costs through the EECRF Rider.

## **XIV. Over or Under-recovery of Energy Efficiency Program Costs**

In Docket No. 47232, the PUC approved energy efficiency costs to be recovered in 2018 of \$46,321,856 consisting of:

\$36,435,834	2018 Forecasted Program Costs
\$11,035,335	2016 Bonus
-\$2,210,578	2016 Over-Recovery
\$1,063,413	2017-2018 Forecasted EM&V Expenses
-\$ 75,969	2017 Adjustment/Errata
<u>\$ 73,821</u>	2016 Rate Case Expense
\$ 46,321,856	Total EECRF Costs

In 2018, actual program costs were \$30,509,259, actual EM&V costs were \$531,335 and total energy efficiency related costs were \$39,863,202. Total revenues collected through the EECRF Rider were \$46,314,829, resulting in overall over-recovery of \$6,451,628.

## **XV. Under Served Counties**

There were no counties within the CenterPoint Houston service territory that were under-served by the Company's energy efficiency programs in 2018. CenterPoint Houston's energy efficiency programs were accessible to all counties within the Company's electric service area. Appendix C lists the counties served by CenterPoint Houston and the amount of savings each county achieved in 2018 through the company's energy efficiency programs.

**Appendix A: Acronyms**

<b>CCET</b>	Center for the Commercialization of Electric Technologies
<b>CLM</b>	Commercial Load Management
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EECRF</b>	Energy Efficiency Cost Recovery Factor
<b>EEP</b>	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EER</b>	Energy Efficiency Report, which was filed as a separate document prior to April 2008
<b>ERCOT</b>	Electric Reliability Council of Texas
<b>HERS</b>	Home Energy Ratings
<b>HTR</b>	Hard-To-Reach
<b>IECC</b>	International Energy Conservation Code
<b>MTP</b>	Market Transformation Program
<b>PUCT</b>	Public Utility Commission of Texas
<b>RCx</b>	Retro-Commissioning
<b>REP</b>	Retail Electrical Provider
<b>RES</b>	Residential
<b>RESNET</b>	Residential Energy Services Network
<b>SCORE</b>	Schools Conserving Resources
<b>SOP</b>	Standard Offer Program
<b>SHEM</b>	Smart Home Energy Management System

## **Appendix B: Glossary**

Please refer to the glossary defined in Substantive Rule § 25.181.

## Appendix C: Reported Demand and Energy Reduction by County

Appendix C  
CenterPoint Energy Houston Electric, LLC Efficiency Programs  
Energy Efficiency Programs  
2018 Demand (kW) and Energy (kWh) Savings at Meter By County

Programs		C O U N T I E S											
		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	Total
Commercial Standard Offer Program (SOP)	kW	3.8	142.1	73.6	1,105.8	39.5	5,145.6	0.0	0.0	29.6	15.3	0.0	6,555.2
	kWh	24,978.0	529,915.0	352,491.0	6,492,854.0	246,229.0	32,530,079.0	0.0	0.0	158,966.0	76,927.0	0.0	40,412,439.0
Score	kW	0.0	166.8	110.3	668.6	13.0	3,451.3	0.0	0.0	211.3	0.0	0.0	4,621.3
	kWh	0.0	819,977.0	553,192.0	3,616,075.0	85,259.0	17,185,933.0	0.0	0.0	1,185,698.0	0.0	0.0	23,446,134.0
Healthcare	kW	0.0	0.0	0.0	0.0	0.0	1,375.9	0.0	0.0	0.0	0.0	0.0	1,375.9
	kWh	0.0	0.0	0.0	0.0	0.0	11,163,354.0	0.0	0.0	0.0	0.0	0.0	11,163,354.0
Data Centers Program	kW	0.0	0.0	0.0	0.0	0.0	998.4	0.0	0.0	0.0	0.0	0.0	998.4
	kWh	0.0	0.0	0.0	0.0	0.0	5,254,702.0	0.0	0.0	0.0	0.0	0.0	5,254,702.0
Commercial Load Management (SOP)	kW	0.0	4,941.2	1,224.4	6,022.6	639.7	97,653.0	0.0	0.0	141.4	1.7	1.9	110,625.9
	kWh	0.0	29,646.9	7,346.4	36,135.6	3,838.3	585,918.3	0.0	0.0	848.7	10.1	11.2	663,755.5
Retro-Commissioning MTP	kW	0.0	23.4	0.0	0.0	0.0	1,403.3	0.0	0.0	0.0	0.0	0.0	1,426.7
	kWh	0.0	123,694.0	0.0	0.0	0.0	4,985,072.0	0.0	0.0	0.0	0.0	0.0	5,108,766.0
REP (Commercial CoolSaver)	kW	0.0	2.7	13.7	12.6	0.0	284.0	0.0	0.0	0.0	0.0	0.0	313.0
	kWh	0.0	3,089.0	12,162.0	10,926.0	0.0	396,005.0	0.0	0.0	0.0	0.0	0.0	422,182.0
Advanced Lighting Commercial	kW	0.0	13.5	0.0	49.4	16.9	235.1	0.0	0.0	10.5	0.0	0.0	325.4
	kWh	0.0	66,676.5	0.0	243,207.7	83,354.2	1,158,518.3	0.0	0.0	51,744.0	0.0	0.0	1,603,500.7
CenterPoint Energy High Efficiency Homes MTP	kW	0.0	881.7	85.9	4,585.3	149.5	6,327.1	0.0	0.0	1,082.6	35.8	0.5	13,148.4
	kWh	0.0	1,407,250.0	160,540.0	7,525,038.0	251,876.0	10,066,237.0	0.0	0.0	1,766,292.0	69,343.0	1,320.0	21,247,896.0
Residential & Small Commercial (SC) SOP	kW	9.4	1.6	0.0	22.9	10.0	433.6	0.0	0.0	0.4	3.9	4.3	486.1
	kWh	19,046.0	9,355.4	0.0	76,104.2	22,666.7	885,385.9	0.0	0.0	3,382.2	8,101.0	5,988.0	1,030,029.4
Smart Thermostat Program (Pilot)	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	kWh	0.0	29,800.0	0.0	87,016.0	2,384.0	263,432.0	0.0	0.0	5,960.0	0.0	0.0	388,592.0
Advanced Lighting Residential	kW	0.0	257.1	0.0	937.8	321.4	4,467.4	0.0	0.0	199.5	0.0	0.0	6,183.3
	kWh	0.0	1,266,854.2	0.0	4,620,946.3	1,583,728.9	22,011,846.9	0.0	0.0	983,136.5	0.0	0.0	30,466,512.8
Residential A/C and Pool Pump Distributor MTP	kW	1.4	182.5	0.9	557.6	54.9	1,944.2	0.0	0.0	100.0	8.6	0.3	2,850.4
	kWh	6,367.0	409,183.3	2,893.1	1,328,428.4	128,065.9	4,784,083.5	0.0	0.0	295,833.6	20,184.3	2,166.0	6,977,205.1
REP (Residential CoolSaver and Efficiency Connection)	kW	0.8	60.4	8.1	362.2	19.5	1,076.2	0.1	0.0	73.2	3.5	1.0	1,605.1
	kWh	2,925.9	177,113.3	23,535.0	992,597.8	58,234.3	3,095,254.3	729.2	0.0	208,961.8	10,768.9	4,482.0	4,574,602.5
Residential Demand Response SOP	kW	23.4	1,324.2	185.8	3,632.3	286.8	13,063.3	3.0	0.0	907.2	47.6	7.7	19,481.4
	kWh	140.6	7,986.8	1,114.6	21,888.4	1,732.5	78,739.9	18.2	0.0	5,458.3	285.4	46.0	117,410.8
Multi-Family Market Rate MTP	kW	0.0	0.0	0.0	40.4	0.0	1,054.7	0.0	0.0	0.0	0.0	0.0	1,095.0
	kWh	0.0	0.0	0.0	103,314.8	0.0	1,811,156.9	0.0	0.0	0.0	0.0	0.0	1,914,471.7
Hard-to-Reach SOP	kW	0.0	6.6	0.0	6.9	19.2	1,364.4	0.0	0.0	0.0	0.0	0.0	1,397.1
	kWh	0.0	7,842.0	0.0	7,899.6	22,965.2	1,823,421.6	0.0	0.0	0.0	0.0	0.0	1,862,128.4
Multi-Family MTP HTR	kW	0.0	0.0	0.0	0.0	0.0	517.7	0.0	0.0	0.0	0.0	0.0	517.6934
	kWh	0.0	0.0	0.0	0.0	0.0	964,202.7	0.0	0.0	0.0	0.0	0.0	964,202.6600
Targeted Low Income MTP (Agencies in Action)	kW	0.0	0.0	0.0	35.8	0.3	4,138.1	0.0	0.0	0.0	0.0	0.0	4,174.3
	kWh	0.0	0.0	0.0	52,187.3	325.8	6,693,477.3	0.0	0.0	0.0	0.0	0.0	6,745,990.4
Programs - TOTAL													
Total kW Savings		39.0	8,003.7	1,702.7	18,040.1	1,570.9	144,933.3	3.2	0.0	2,755.9	116.2	15.6	177,181
Total kWh Savings		53,457.5	4,888,383.4	1,113,274.1	25,214,619.1	2,490,659.8	125,736,819.6	747.4	0.0	4,666,281.1	185,619.7	14,013.1	164,363,875